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EXAMINER	
FISH, JAMIESON W	

ART UNIT	PAPER NUMBER
2616	

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/836,313	BATES ET AL.	
	Examiner	Art Unit	
	Jamieson W. Fish	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 April 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *17 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 16 and 17 are objected to because of the following informalities: on line 3 of both claims a verb such as "broadcasting" is required between "a" and "seldom/frequently" or else "program" must to changed to "channel." The claims have been interpreted with the insertion of "broadcasting."

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim **13** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claim is written such that it is dependent upon itself. It has been interpreted that the applicant intended to make this claim dependent on claim 12. Claim 13 and its dependent claims have been evaluated with this interpretation.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims **1-3, 11,** and **18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Amano (US #5,323,240) in view of Saib et al. (US #6,505,346).

6. Regarding claim **1**, Amano teaches A method for recalling a previous channel of programming information comprising the steps of: initializing *the channels* of interest (See Col. 3 lines 24-35, It is inherent that upon turning on the TV the channels of interest would be initialized from memory.); selecting a first channel of program information (See Col. 3 lines 15-17); monitoring an elapsed time spent on the first channel (See Col. 3 lines 19-20); identifying and storing the first channel as *a channel* of interest if the elapsed time spent on the first channel exceeds a predetermined time threshold (See Col. 3 lines 24-35 If the time spent watching a channel exceeded the amount of time spent watching the lowest ranked channel it would be stored.); switching to a plurality of additional channels, wherein the elapsed time spent on the additional channels does not exceed the predetermined time threshold (See Col. 3 lines 36-40 Time spent watching a channel is calculated after every channel change. Channel changes could occur such that the time spent on any one channel did not exceed the amount of time spent watching the lowest ranked channel); and activating a selective view function to return to the channel of interest from one of the plurality of additional channels (See Fig 4 and Col. 3 lines 54-67, Col. 4 lines 1-7). When the F key is activated the flow chart of Fig 4. is used to cycle through the stored channels. Amano's method differs from the claimed method in that: it stores multiple channels of interest as opposed to one, it ranks these channels according to the time spent watching each, and its function uses an algorithm to scroll through the multiple channels of interest, based on ranking, as opposed to simply recalling a single channel of interest. If Amano's method stored a single channel instead of multiple channels one channel would simply

replace another as the channel of interest and when the F key was pressed it would directly recall the channel of interest. The function of storing and returning directly to a single channel is well known in the art as described in Saib (See Col. 1 lines 21-28, i.e. when the user goes to channel C from channel A, channel A is stored and would be recalled if the JUMP function was activated). In light of the teachings from Saib, it would have been obvious to one of ordinary skill in the art to modify Amano's invention so that it stored a single channel and recalled this channel when the F key was pressed. The motivation for storing a single channel would have been having a method that only stored the channel the viewer was most interested in, thereby not allocating memory space for storing other channels. The motivation for having the F key return this single channel would have been giving the user a function that returned to a channel of interest without having to cycle through a plurality of channels of interest.

7. Regarding claim **2**, claim 2 requires that the step of switching to a plurality of additional channels further includes the step of storing one of the additional channels as the channel of interest, if the amount of time spent on the one channel exceeds the predetermined time threshold. The modified Amano as discussed above with respect to claim 1 would include such a step (See Col. 3 lines 24-35). Thus teaching that the first channel as well as any channel that exceeded the time spent tuned to the current channel of interest would be stored as the new channel of interest.

8. Regarding claim **3**, claim 3 requires that the step of storing one of the plurality of additional channels as the channel of interest upon the activation of the select view function. In the modified Amano, as discussed with regards to claim 1, teaches that a

channel would be stored as a channel of interest if the time spent on the channel exceeds a predetermined time threshold. Amano further teaches that the time spent watching a channel is determined upon the activation of the select view function (See Col. 3 lines 24-35). Thus, a channel is stored as a channel of interest upon the activation of the select view function.

9. Regarding claim **11**, Amano teaches a channel selection apparatus for recalling a previously accessed channel of interest, comprising: a receiver capable of receiving a plurality of channels of broadcast material and a user generated channel selection signal, wherein the channel selection signal selects one of the plurality of channels of broadcast material (See Fig. 1 and Col. 2 lines 22-49) the receiver further comprising: a CPU (See Fig. 1 CPU 9 and Col 2 lines 31-33) and circuitry resident in the CPU (See Fig. 2 and Col. 2 lines 50-64), the circuitry configured to measure the elapsed time spent on a selected channel (See Fig. 2, Time Counting Circuit 9a, and Col. 2 lines 52-54); store the selected channel as a channel of interest if the selected channel exceeds a predetermined time threshold (See Fig 2, Grade Circuit, Sort Circuit, and Memory circuit 9b-d, and Col. 3 lines 24-35. Amano teaches that if the time spent watching a channel exceeded the amount of time spent watching the lowest ranked channel, it would be stored); and switch to the channel of interest from the currently selected channel upon receipt of a channel recall signal from a selective view function (See Fig 4 and Col. 3 lines 54-67, Col. 4 lines 1-7. When the F key is activated the flow chart of Fig 4. is used to cycle through the stored channels). Amano's apparatus differs from claim 11in that its function uses an algorithm to scroll through the multiple channels of

interest, based on ranking, as opposed to simply recalling a single channel of interest. The function of storing and returning directly to a single channel is well known in the art as described in Saib (See Col. 1 lines 21-28, i.e. when the user goes to channel C from channel A, channel A is stored and would be recalled if the JUMP function was activated). It would have been obvious to one of ordinary skill in the art to modify Amano's invention so that it recalled the channel of interest when the F key was pressed. The motivation for having the F key return a single channel would have been giving the user a function that returned a channel of interest that without having to cycle through a plurality of channels of interest. Amano also differs from the claimed apparatus in that the CPU of his apparatus operates from circuitry as opposed to a program stored in memory. Official notice is taken that it is well known in the art to have a receiver with a CPU that operates a program stored in memory. It would have been obvious to one of ordinary skill in the art to modify Amano's CPU so that the functions it performed were executed from a program stored in memory. One would have been motivated to make such a modification since software is more versatile than hardware.

10. Regarding claim **18**, Amano teaches a CPU configured to measure an elapsed time spent on a selected channel, store the selected channel as a channel of interest if the selected channel exceeds a predetermined time threshold and switch to the channel of interest from a currently selected channel upon receipt of a channel recall signal (See Col. 2 lines 50-60 and Col. 3 lines 15-53). Amano differs from claim 18 in that Amano's function uses an algorithm to scroll through the multiple channels of interest, based on ranking, as opposed to simply recalling a single channel of interest. The function of

storing and returning directly to a single channel is well known in the art as described in Saib (See Col. 1 lines 21-28, i.e. when the user goes to channel C from channel A, channel A is stored and would be recalled if the JUMP function was activated). It would have been obvious to one of ordinary skill in the art to modify Amano's invention so that it recalled the channel of interest when the F key was pressed. The motivation for having the F key return a single channel would have been giving the user a function that returned a channel of interest that without having to cycle through a plurality of channels of interest. Amano's CPU uses circuitry and not a program product and does not have a signal bearing medium bearing the program. Official notice is taken that it is well known in the art to have a receiver with a signal bearing medium which contains a program product with operating instructions for a CPU. It would have been obvious to one of ordinary skill in the art to modify Amano's CPU so that the functions it performed were executed from a program stored in memory. One would have been motivated to make such a modification because software is more versatile than hardware.

11. Claims **4-10** and **12-17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Amano in view of Saib, and further in view of Schlack et al. (US #2002/0129368)

12. Regarding claim **4**, Amano teaches storing the ranking of channels based on the amount of time spent on the channel the last time it was accessed (See Col. 3 lines 24-35). Amano teaches that this timing data is stored so it can be used by the grading and sorting circuit upon activation of the F or channel key (See Col 3 lines 24-30). Amano's teachings are deficient within the limitations of claim 4 in that: Amano fails to teach total

accumulated time spent accessing the channel is not stored and no information pertaining to a reference time frame is stored (i.e. when the channel has been accessed). Storing such information pertaining to a viewer's channel history is well known in the art as described in Schlack (See Paragraph 184). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Amano and Saib with Schlack to create a method of recalling a previous program channel, which further included the step of storing historical channel access information in a channel history log. The channel history log would be used to facilitate the delivery of targeted content.

13. Regarding claim **5**, claim 5 differs from the modified Amano, as discussed in regards to claim 4, in that in includes the step of resetting the channel of interest upon the completion of a program on the channel of interest. The modified Amano teaches resetting the channel of interest if the time spent watching a channel exceeds a time threshold when the change channel function is activated (See Col. 3 lines 24-30). Amano does not disclose resetting the channel of interest at the completion of a program. Schlack teaches events such as the user changing a channel and the completion of a program are similar in that they can both be monitored and stored (See Paragraph 129). Since completion of a program is a similar event to changing a channel, it would have been obvious to one of ordinary skill in the art to further modify Amano and Saib with Schlack to include the step of resetting the channel of interest upon the completion of a program on the channel of interest. The motivation for such a

modification would have been to have another event that could alternatively reset the channel of interest.

14. Regarding claim **6**, claim 6 differs from the modified Amano as discussed in regards to claim 5 in that it further includes the step of storing a program channel of historical interest as identified by the channel history log as the program of interest. Schlack teaches using viewing history to add preferred programs to a viewer profile stored in memory (See Paragraph 135 and 126). Schlack also teaches that viewer profile is produced by the processing of an event, such as the completion of a program (See paragraphs 129 and 130). According to the teaching, Schlack inherently teaches using viewing history, which includes information about channel history, to store a program as a program of interest at the completion of a program. Therefore, it would have been obvious to one of ordinary skill in the art to further modify Amano as discussed with claim 5 to further include the step of storing a program channel of historical interest as identified by the channel history log as the program of interest. The motivation for such a modification would have been to have a method that resets the channel of interest and stores a program channel as a channel of interest in one step. Also, it would be advantageous to have a stored program of interest so that a viewer could recall a program of interest even if the channel that broadcasted the program decided to broadcast it at a different time.

15. Regarding claims **7** and **8**, claims 7 and 8 differs from the modified Amano as discussed in regards to claim 6 in that the step of identifying the first channel as a channel of interest if the elapsed time spent on the first channel exceeds a

predetermined time threshold further includes the step of lengthening the predetermined time threshold if the first channel is broadcasting a seldom viewed program as determined by the channel history log. Amano teaches storing a first channel as a channel of interest by using a time threshold, where the time threshold is a variable that is determined by the amount of time spent previously viewing other channels and thus the amount of time required to store the first channel as a channel of interest would be shortened or lengthened based on the amount of time spent watching previously viewed channels. (See Col. 3 lines 24-30). However, Amano does not explicitly teach that the time is varied in relation to the frequency in which the program broadcasted on the first channel is viewed. Schlack, as discussed with claim 6, teaches storing information about channel viewing information that includes the frequency a particular channel is viewed and that this information can be further broken down to individual programs (See paragraph 135). Since Amano has the ability to shorten or lengthen his time threshold, it would have been obvious to one skilled in the art to further modify Amano as discussed with claim 6 with Schlack to shorten or lengthen the predetermined time threshold if the first channel is broadcasting a seldom or frequently viewed program as determine by the channel history log. The motivation for such a modification would have been to develop a method for varying the time parameter that incorporated more detailed information about a television viewer's habits.

16. Regarding claim **9**, claim 9 differs from the modified Amano as discussed in regards to claim 6 in that the step of initializing a channel of interest includes the step of storing a program that has historically been of interest in the current time slot as a

channel of interest. The modified Amano initializes the channel of interest based on a channel ranking system (See Col. 3 lines 40-66) and not a program ranking system. Schlack teaches ranking programs based on historic interest level (See figure 24 and Paragraph 191) and that such information can be monitored for a specific time slot (See Paragraph 189). Since Amano uses a ranking system to initialize the channel of interest, it would have been obvious to one of ordinary skill in the art to modify the receiver taught in Amano as discussed in claim 6 with Schlack to initialize the channel of interest based on rankings of a program for a specific time slot as opposed to rankings of channels, and to store a program that has historically been of interest in the current time slot as a channel of interest. The motivation for such a modification would have been to create a ranking system that included program information instead of just channel information and uses this improved ranking system to further customize the initial channel of interest.

17. Regarding claim **10**, claim 10 differs from the modified Amano as discussed in regards to claim 6 in that the method of initializing a channel of interest includes the step of storing the channel that was last accessed during the time slot as the channel of interest. The modified Amano initializes the channel of interest based on a channel ranking system (See Col. 3 lines 40-66), this ranking system does not take into account when a particular channel was last accessed for a given time slot. Storing information pertaining to a viewer's channel history such as which channels were accessed and when a channel change occurred during a particular time slot is well known in the art as described in Schlack (See Paragraph 184 and 185). It would have been obvious to one

skilled in the art to further modify the ranking system of Amano such that it further depended on the last channel accessed during a particular time slot. The motivation for such a modification would have been to create ranking system that was based on viewing patterns and using this ranking system to further customized initial channel of interest.

18. Regarding claim **12**, claim 12 differs from the apparatus disclosed by Amano in that the program is further configured to store a program guide for tracking start and stop times of programming material currently being broadcast on the plurality of channels. It is well known it the art to have a program in a receiver to store a program guide for tracking the start and stop time of programming material currently being broadcast on the plurality of channels as disclosed in Schlack (See Paragraphs 142-144). In light of the teaching from Schlack, would have been obvious to one of ordinary skill in the art to modify the apparatus disclosed by Amano by having a receiver which contained a program guide for tracking start and stop times of programming material currently being broadcast on a plurality of channels. The motivation for such a modification would have been to have a receiver with the capability of providing the end user with information about future programming on broadcast channels.

19. Regarding claim **13,** claim 13 differs from the modified Amano apparatus described in discussion of claim 12 in that the program is further configured to store a user history of program material accessed by a user over a predetermined time period. Schlack teaches a program that is configured to store a user history of program material accessed by a user over a predetermined time period (See Paragraph 135). It would

have been obvious to one of ordinary skill in the art use the teaching of Schlack to further modify Amano's apparatus to further configure the receiver program to store a user history of program material accessed by a user over a predetermined time period. The motivation for such a modification would have been the ability to track the viewing habits of end users.

20. Regarding claim **14**, claim 14 differs from the modified Amano apparatus described in the discussion of claim 13 in that the program is further configured to replace the channel of interest with a new channel that has historically been of interest in the current time slot, if the program guide indicates that the program on the current channel of interest has ended. The modified Amano apparatus switches the channel of interest based whether or not the time spent watching the current channel being view exceeds a time stored in memory that is the time spent watching a previous channel, (See Col. 3 lines 40-66). Amano does not teach changing the channel of interest at the completion of a program or that this new channel of interest is a preferred channel for the current time slot. Receivers that contain programs capable of storing information pertaining to a viewer's preferred channel of interest for a given time slot is in well known in the art as described by Schlack (See figure 24 and Paragraphs 189 and 191). It was shown in the discussion of claim 5, that Amano can be modified by Schlack to create a method of resetting the channel of interest at the completion of a program. It would have been obvious to one of ordinary skill to further modify the apparatus disclosed by Amano with the teachings of Schlack to have this method embodied in a program that is further configured to replace the channel of interest with a new channel

that has historically been of interest in the current time slot, if the program guide indicates that the program on the current channel of interest has ended. One would have been lead to such a modification in order to provide the program provider with specific information about a user's viewing history to determine the channel of interest.

21. Regarding claim **15**, claim 15 differs from the modified Amano apparatus described in the discussion of claim 13 in that the program is further configured to initially set the channel of interest to a channel that has historically been of interest in the current time slot, as determined by the user history. As discussed with respect to claim 9, it would have been obvious to combine the teachings of Amano and Schlack to create a method of initially setting the channel of interest to a channel that has historically been of interest in the current time slot, as determined by the user history. It would have also been obvious to embody this method in the form of a program. The motivation for this being that programs are the preferred methods in a modern television receiver.

22. Regarding claims **16** and **17**, in the discussion of claims 7 and 8 it was shown that the combined teachings of Amano and Schlack can be used to create a method of lengthening or shortening the predetermined time threshold if the selected channel is broadcasting a seldom or frequently viewed program. It would have also been obvious to embody this method in the form of a program. The motivation for this being that programs are the preferred methods in a modern television receiver.

23. Claim **19** is rejected under 35 U.S.C. 103(a) as being unpatentable over Amano and Saib as applied to claim **18** above, and further in view of Meadows (US# 4,060,839).

24. Regarding claim **19**, Amano, as modified by Saib, fails to teach a signal bearing medium that includes at least one of a transmission medium and a recordable medium. Signal bearing mediums that include at least one of a transmission medium and a recordable medium are well know in the art, such a floppy disc disclosed by Meadows (See Col. 1, lines 8-12). It would have been obvious to one of ordinary skill in the art to further modify Amano and Saib to store a program product on a signal bearing medium that included at least one of a transmission medium and a recordable medium, as taught in Meadows. One would have been motivated to do so, in order to allow distribution of a program product to be more convenient.

Conclusion

25. Any inquiry concerning this communication should be directed to Jamieson W. Fish at telephone number 703-305-0884. The examiner can normally be reached on Mon.- Fri. from 8:00 am to 5:00.

26. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Andrew Faile can be reached at 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-308-5359. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JF 11/15/2004

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